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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 10/070,903   | 07/24/2002  | Peter Choi           | 03715.0112                  | 4605             |
| 7590 02/20/2004  |             |                      |                             |                  |
| Finnegan Henderson Farabow<br>Garrett & Dunner<br>1300 I Street N W<br>Washington, DC 20005-3315 |             |                      | EXAMINER<br>CHURCH, CRAIG E |                  |
|  |             |                      | ART UNIT<br>2882            | PAPER NUMBER     |

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

K.D

**Office Action Summary**

Application No.

10/070,903

Applicant(s)

CHOI, PETER

Examiner

Craig E. Church

Art Unit

2882

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/21/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**The drawing amendments are approved.**

**Claims 17, 18, 32, 33, 47 and 48 are are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 17, 18, 32, 33, 47 and 48 recite how the device may be used rather than further limiting the structure recited in their parent claims as required.**

**The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:**

**A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.**

**Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.**

**Claims 1-3 are rejected under 35 U.S.C. § 103 as being unpatentable over Miller (5235191) in view of Grady (4896344). Miller teaches an x-ray system comprising x-ray source 24, object support 14, image converter screen 20, angled mirror, zoom lens 36 (lines 27-35 of column 6), CCD camera 38, image processor 42, computer 44, data storage 48 and monitor 46. Grady teaches x-ray apparatus comprising x-ray source XT, image converter R, lens L, light intensifier I and camera VT. Miller's system does not include a light intensifier, but it would**

have been obvious to one of ordinary skill in the art at the time the invention was made to employ therein such a device as taught by Grady in order to improve imaging sensitivity.

Applicant's arguments filed November 21, 2003 have been fully considered but they are not persuasive. A characteristic of all optical magnification systems is that as the image is enlarged, (spread out) the brightness of any given region thereof falls off as the original luminance is expanded over the larger area of the magnified image. This is why high power binoculars have larger objective lenses, ie to compensate for dimmer images that accrue to high magnification. To equip the Miller system with image intensification means to compensate for dimming of its magnified image would have been obvious to the mere routineer even without the Grady teaching. This phenomenon is entirely separate and distinct from the "field of view" discussed by applicant, and the well known laws of nature cannot be obviated by applicant's recitations from the MPEP or of case law.

It is not required that either reference refer specifically to the other as argued. Rather the hypothetical person of ordinary skill in the art may be motivated to combine prior art teachings by his own common sense and general knowledge. See for example:

**In re Nilssen, 7 USPQ2d 1500, 1988**

**Milliken Research v. Dan River Inc, Federal Circuit, 1985**

**Art Unit: 2882**

**Ex parte Obiya, 227 USPQ 59, 1985**

**Ex parte Clapp, 227 USPQ 972,973, 1984**

**In re Keller, 208 USPQ 871, 1981**

**In re Jacoby, 135 USPQ 317, 1962**

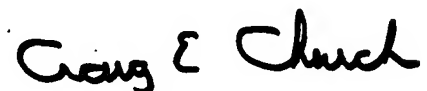
**In re Sernaker, 217 USPQ 1.6, 1983 where the Court declared**

**The (district) court has said, and we agree, it is not necessary that the prior art suggests expressly or in so many words the "changes or improvements" the inventor has made. It is only necessary that he apply "knowledge clearly present in the prior art."**

**THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).**

**A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.**

**Any inquiry concerning this communication should be directed to Examiner Church at telephone number (571) 272-2488.**



**CRAIG E. CHURCH  
Senior Examiner  
ART UNIT 2882**